



Dart Aerospace Ltd.
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C3-19C

Job Sheet 188465



Part No: C3-19C

Job Qty: 1 pcs

Part Name: C3 Cage



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 1/10/19

Job Tracking No:

Due Date: 1/25/19

Created By: Marie Lajeunesse

Type: SOLD

Description:

Note: DWG C3-19C Rev 5 IPP Rev A 18.03.29 New issue DP Verify DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier	Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier Lead Time	
100	Large Fab - Welded Assy-1	1 pcs	1/25/19		0.00	10.00	Large Fab - 1	EL
							Large Fab - 10	
							Large Fab - 2	
							Large Fab - 3	
							Large Fab - 4	
							Large Fab - 5	
							Large Fab - 6	
							Large Fab - 7	
							Large Fab - 8	
							Large Fab - 9	
110	QC 9	1 pcs	1/25/19		0.00	0.00	QC 9 - 10	Cpc
							QC 9 - 18	
							QC 9 - 24	
							QC 9 - 43	
							QC 9 - 50	
							QC 9 - 9	
120	QC 5	1 pcs	1/25/19		0.00	0.00	QC 5 - 10	Cpc
							QC 5 - 12	
							QC 5 - 17	
							QC 5 - 18	
							QC 5 - 19	
							QC 5 - 22	
							QC 5 - 24	
							QC 5 - 3	
							QC 5 - 38	
							QC 5 - 42	
							QC 5 - 43	
							QC 5 - 49	
							QC 5 - 51	
							QC 5 - 58	
							QC 5 - 68	
							QC 5 - 9	

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐	OTHER : ☐			

				QC 5 - 50	
				QC 5 - 30	
130 Powdercoat - 6 Fire Red - B4B 1 pcs	1/25/19	0.00	0.50	Powdercoat - 1 - B4B	
				Powdercoat - 2 - B4B	BEB19-01-24
				Powdercoat - 3 - B4B	
				Powdercoat - 4 - B4B	
140 QC 3 1 pcs	1/25/19	0.00	0.00	QC 3 - 10	
				QC 3 - 13	
				QC 3 - 15	
				QC 3 - 17	
				QC 3 - 18	
				QC 3 - 2	
				QC 3 - 26	
				QC 3 - 28	
				QC 3 - 3	
				QC 3 - 30	
				QC 3 - 34	
				QC 3 - 36	
				QC 3 - 38	
				QC 3 - 41	
				QC 3 - 51	
				QC 3 - 58	
				QC 3 - 59	
				QC 3 - 6	
				QC 3 - 68	
				QC 3 - 9	
150 Packaging 3-1 - Stock - B4B 1 pcs	1/25/19	0.00	0.00	Packaging 3 - 1 - B4B	
				Packaging 3 - 2 - B4B	
				Packaging 3 - 3 - B4B	
				Packaging 3 - 4 - B4B	DAS
				Packaging 3 - 5 - B4B	30
				Packaging 3 - 6 - B4B	9-89
				Packaging 3 - 7 - B4B	
				Packaging 3 - 8 - B4B	
				Packaging 3 - 9 - B4B	
				Packaging 3 - 10 - B4B	
				Packaging 3 - 11 - B4B	
				Packaging 3 - 12 - B4B	
				Packaging 3 - 13 - B4B	
				Packaging 3 - 14 - B4B	
				Packaging 3 - 15 - B4B	
				Packaging 3 - 16 - B4B	
				Packaging 3 - 17 - B4B	
				Packaging 3 - 18 - B4B	
				Packaging 3 - 19 - B4B	
				Packaging 3 - 20 - B4B	
				Packaging 3 - 21 - B4B	
				Packaging 3 - 22 - B4B	
				Packaging 3 - 23 - B4B	
				Packaging 3 - 24 - B4B	
				Packaging 3 - 25 - B4B	
				Packaging 3 - 26 - B4B	
				Packaging 3 - 27 - B4B	
				Packaging 3 - 28 - B4B	
				Packaging 3 - 29 - B4B	
				Packaging 3 - 30 - B4B	
				Packaging 3 - 31 - B4B	
				Packaging 3 - 32 - B4B	
				Packaging 3 - 33 - B4B	
				Packaging 3 - 34 - B4B	

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

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Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

				Packaging 3 - 35 - B4B	
				Packaging 3 - 36 - B4B	DAS
160 QC 21 - SA	1 pcs	1/25/19	0.00 0.00	QC 21 - SA - 21	21
				QC 21 - SA - 70	9-00

Part Op 100 - Fabricate per Drwg - 1-MANUFACTURE AS PER DWG, TACK WELD FOR INSPECTION BY: _____ USE
 Descriptions: WELDING JIG C3-19C. 2-Weld as per DWG. ***SEE NOTE 1, ALL HOLES MUST ALIGN***
 110 - QC9- Inspect visual per QSI004- Fusion Welds
 120 - QC5- Inspect part completeness to step on W/O
 130 - Fire Red(Ref.4.3.5.10) per QSI005 4.3 START TIME: 2:20 OVEN TEMPERATURE: 320° FINISH TIME: 2:50
 140 - QC3- Inspect Part Finish
 150 - Identify as per dwg & Stock Location: _____
 160 - QC21- Final Inspection - Work Order Release

1129229

Job BOM				
Part / Item	Component Name	Quantity	Operation	Container
C3-18-1	Lifting Plate	2 pcs (2 ea)	100-Large Fab - Welded Assy-1	S144716
C3-18-5	Boss	2 pcs (2 ea)	100-Large Fab - Welded Assy-1	S116808
C3-18-6	Bumper Bracket	1 pcs (1 ea)	100-Large Fab - Welded Assy-1	S058911
MT-A513-T-0.875W0.120 A513 Seamless Alloy Steel Round Tubing 0.875"dia. x 0.120" Wall		8.7000 ft (8.7 ea)	100-Large Fab - Welded Assy-1	S116715

Job Allocations				
Operation	Component Part	Required	Inventory	Allocated
100-Large Fab - Welded Assy-1	C3-18-1	2	0	0
	C3-18-5	2	0	0
	C3-18-6	1	4	0
	MT-A513-T-0.875W0.120	9	45	0

Part Specifications
Specifications could not be found.

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

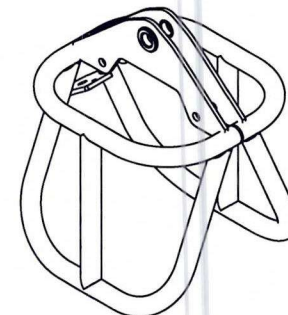
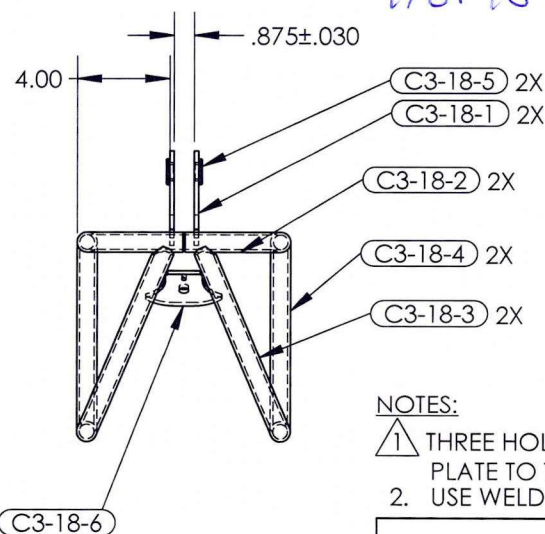
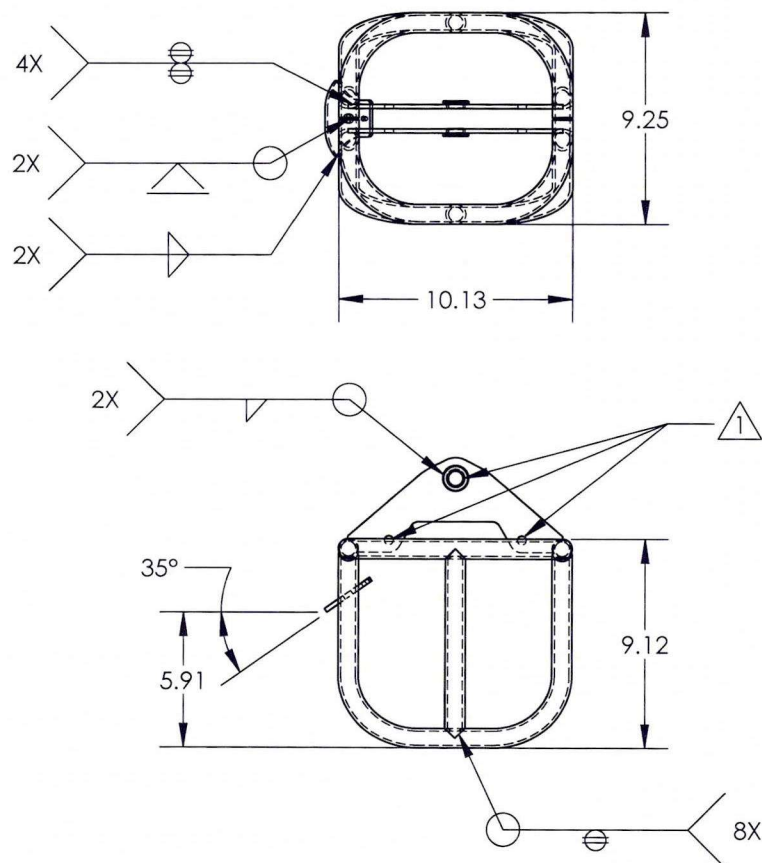
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Work Order update only ☐

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								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

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REVISIONS				
REV	ECR	DESCRIPTION	DATE	INITIAL
4	15-0053	UPDATED TO NEW DRAFTING STANDARDS. ADDED WELD FIXTURE NOTE.	2/27/2015	DPD
5	16-0038	CH'D FINISH SPEC WAS RAL 3000 IS T009-RD03. CH'D DIM WAS .875 IS .875 ±.030. CH'D WELD CALLOUT FROM FILLET TO BEVEL.	2/17/2016	DPD



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SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 188465 MWS
1901-10

NOTES:

1. THREE HOLES MUST BE ALIGNED FROM FRONT PLATE TO THE BACK PLATE.
2. USE WELD FIXTURE C3-19C-F.

ASSY QTY	ASSY QTY	B/O	Part #	UNIT QTY	Description
			C3-18-1	2	LIFTING PLATE
			C3-18-2	2	TOP SEMI-RING
			C3-18-3	2	SIDE LOOP
			C3-18-4	2	STIFFENER BAR
			C3-18-5	2	BOSS
			C3-18-6	1	BUMPER BRACKET

(C3-19C)

WELDMENT

DART AEROSPACE	
TITLE WELDMENT C3 CAGE	
DWG NO. C3-19C	REV 5
MAT'L HEAT TREAT FINISH POWDERCOAT RED SPEC T009-RD03	
DRAWN BY: APICAL CHECKED: CLOUGH OPSS APPR: ANDERSON QA APPR: LINDSAY APPROVED: GILBERT	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .010 FRACTIONS ± 1/8 .XX ± .03 ANGLES ± 1° .X ± .1 SURFACES = 125° 1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009 USED ON MODEL
SCALE 1:8	DATE 7/21/2009
SHEET 1 OF 1	



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Container No: S147469



Part: C3-19C

Job No: 188465

Serial No/Batch: S147469

Revision: 5

Inspector:

Exp Date:

Instructions:

Date: 01/23/19